Using Source Water Assessments for Source Water Protection

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Background

- Maine is blessed with a long, rocky coastline
- This coastline attracts large numbers of seasonal residents
- Public water suppliers rely on small ponds and wells to serve their water needs
- Personal freedom and local control are highly valued.

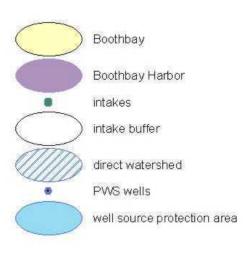
Boothbay History

- Boothbay and Boothbay Harbor separated over water supply, leaving the source in Boothbay and most customers in the Harbor.
- East Boothbay developed a small, ground-water fed system, operated locally.
- Development spread inland from the ocean, putting pressure on both the wells and watershed.

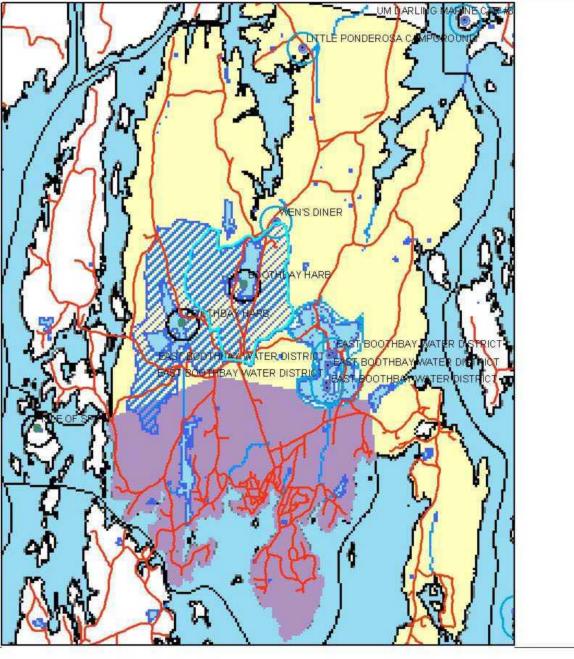




Boothbay and Boothbay Harbor PWS





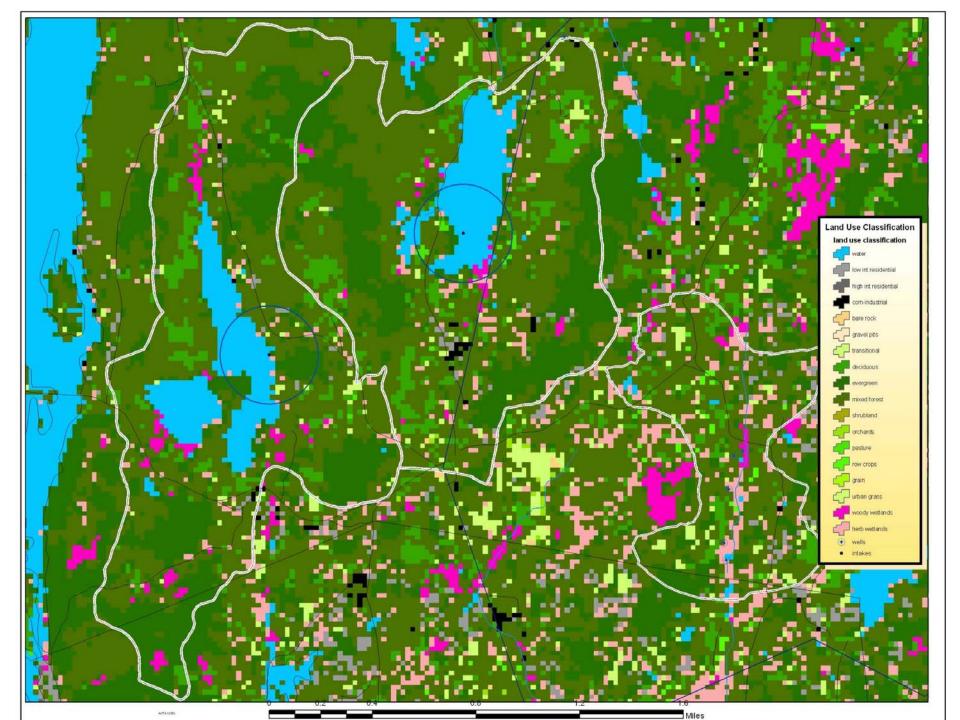


Where we were

- Boothbay had water sources
- Boothbay Harbor had most of the customers
- East Boothbay had no technical capacity
- All had development pressure
- Summer demand exceeded "safe yield"

SWAP as a Catalyst

- East Boothbay Delineation: pumping at the limit of the basin
- East Boothbay SRF discussion: cost of new facilities beyond local capacity
- PL 761 makes water systems "abutter"
- Large campground proposed in watershed
- SWAP data collection identifies threats



Coalition Building

- Proposal to use Adams Pond as mitigation for coastal wetlands alteration, DWP intervened
- Maine DWP funded pilot SWAP implementation with GMC and MWUA
- Boothbay Harbor selected as first pilot
- Evaluation of water quality and quantity reinforced understanding of problems

Opportunity Knocks

- Boothbay, East Boothbay, and Boothbay
 Harbor start talking about common interests
- Pilot program education helped them find common ground.
- Water systems merged into Boothbay Region Water District

Knickerbocker Lake

- Campground proposal gave water district and property owners a common cause
- Knickerbocker Lake Association formed with help from Water District
- Grant to assist in watershed assessment, planning and improvement from DEP and Extension
- Ongoing discussions with DEP and PUC over intake and lake level

Adams Pond

- Developing Watershed Protection Ordinance
- Maine Rural Water drafting ordinance
- "downtown" Boothbay is a concern
- Lots of work left to do
- Seasonal outflow from the pond still an issue for fisheries management

Lessons Learned

- Education and awareness of local citizens and officials is key
- Be prepared to take advantage of local situations to enhance source protection
- Use state regulations as tools for local solutions
- Devote staff resources to source protection
- Take advantage of agency and local volunteer assistance

Policy Implications

- Future development is the single largest risk to public water supplies
- Implementation of PL 761 is limited by the capacity of the suppliers and town politics
- Public awareness of the risks to supplies is low: abundant, clean drinking water is taken for granted

